# Indian Health Diabetes Best Practice Diabetes Self-Management Education and Support

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# **Best Practice Guidelines**

# What is diabetes self-management education and support?

Diabetes self-management education (DSME) and support is the ongoing process of facilitating the knowledge, skills, and attitudes that individuals need to manage their diabetes or to prevent its onset. The DSME process incorporates an individual's needs, goals, and life experiences and is guided by evidence-based standards. Depending on individual needs, content of DSME may include topics such as understanding diabetes, lifestyle behaviors such as nutrition management and physical activity, using medications safely, monitoring blood glucose levels and interpreting results, preventing, detecting, and treating complications, and addressing psychosocial issues related to behavior change.

Since people with diabetes and people at risk for diabetes and their family members perform or provide more than 95% of their diabetes care on their own, DSME is a critical element in achieving effective self-management and improving outcomes. With appropriate education, people can solve daily health-related problems or make the complex diabetes self-management decisions required for good health and quality of life. Ultimately, as a result of participating in DSME, individuals are empowered to change their behaviors and lifestyles and actively manage their diabetes or prevent its onset.

The overall objectives of DSME are to:

- support informed decision-making
- promote diabetes self-management and prevention behaviors
- teach problem-solving skills
- encourage active collaboration with the health care team, and
- improve clinical outcomes, health status, and quality of life.

DSME includes educational, clinical, and community-based interventions and consists of the following elements:

- patient-centered, multi-disciplinary team approach to care
- comprehensive education process that incorporates the needs, goals, and life experiences of people with diabetes and those at risk for diabetes and is guided by evidence-based standards (Funnel, 2007)
- interactive patient education strategies and culturally appropriate materials that are collaborative and ongoing
- periodic follow-up and evaluation of progress toward the attainment of patient-defined clinical and behavioral goals

- individual and/or group visits, and
- community education that increases awareness of diabetes and provides a supportive environment for people with diabetes and those at risk for diabetes.

# Why is diabetes self-management education and support important?

When people with a chronic disease or those at risk assume self-management responsibilities, they gain the opportunity to improve disease and risk factor control and to attain the highest possible quality of life. DSME helps people with diabetes and those at risk develop the knowledge, skills, attitudes, and behaviors needed to make informed decisions for managing their diabetes and risk factors throughout their lifetime.

DSME also can affect outcomes at all levels of diabetes treatment and prevention—primary, secondary, and tertiary. DSME can:

- improve metabolic outcomes such as A1c, blood pressure, and lipid levels
- reduce risk of acute and chronic complications
- improve quality of life as a result of positive lifestyle changes, and
- inform individuals, families, and communities about the potential benefits of adopting healthy lifestyles to manage diabetes or prevent/delay diabetes onset.

# **Key Recommendations**

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Use a five-step approach when providing patient-centered DSME. These steps include:

- 1) assessment
- 2) goal-setting
- 3) planning
- 4) implementation, and
- 5) evaluation and monitoring.

Perform an individual assessment and develop an education plan through collaboration between the individual with diabetes or at risk and at least one member of the health care team. The DSME plan includes self-management goals, appropriate learning activities, and support strategies.

Designate a coordinator with skills in planning, implementing, and evaluating diabetes education programs to assess and identify the resources needed to develop and sustain quality DSME services.

Use evidence-based standards to guide the development of quality DSME services.

Partner with local clinical and community resources to provide diabetes education that enhances provision of ongoing self-management support and promotes adoption of healthy behaviors and lifestyles.

# **Scope and Purpose**

This best practice describes key elements that are needed to build and sustain quality DSME and support services for any person with diabetes (type 1, type 2, and gestational diabetes), regardless of age or duration of diabetes, and for those at risk for diabetes.

The best practice addresses the following questions:

- 1. What is DSME and support?
- 2. What are the five essential components of the DSME process?
- 3. What evidence-based standards are used to develop and evaluate quality DSME services?
- 4. How can local needs for and availability of DSME resources be assessed?

- 5. What programs and resources are available to develop a quality DSME program?
- 6. How can local clinical and community programs collaborate to raise awareness about diabetes and foster a supportive environment for people with diabetes and those at risk for diabetes?

The best practice objectives\* are to:

- provide a framework for delivering quality DSME services
- increase the percentage of people with diabetes and those at risk for diabetes who have a documented, individualized education assessment and education plan
- increase the percentage of people with diabetes and those at risk who receive DSME and support based on their individual needs
- increase individuals' confidence to manage their health and diabetes
- increase the percentage of people with diabetes and those at risk who set and meet their self-identified diabetes self-management behavioral goals
- increase collaboration and communication among multi-disciplinary clinical and community health team members to support and enhance the learning process and lifestyle changes of people with diabetes and those at risk for diabetes
- establish a formal or informal referral mechanism among the DSME program, the health care facility, and community programs
- perform periodic resource assessments (e.g., of funding, staff levels, staff training, and education materials) that ensure ongoing delivery of appropriate, quality DSME services.
- \* Measures of progress toward these objectives need to occur before the intervention and at designated times thereafter.

Intended users of this best practice are:

- primary care and diabetes care team members
- diabetes education teams
- DSME program coordinators
- community health workers who provide diabetes awareness and support programs, and
- leaders of health care organizations.

This document provides guidance for programs that seek to improve and enhance delivery of DSME. There are three fundamental questions to address as you plan and implement your best practice. These questions are:

- 1. What are you trying to accomplish by implementing this best practice?
- 2. How will you know if what you do makes things better?
- 3. What can you do to make things better?

See Appendix A for examples of answers specifically related to DSME.

These recommendations are intended to be used within American Indian and Alaska Native communities and are consistent with the *IHS Standards of Care for Adults with Type 2 Diabetes* and the IHS Integrated Diabetes Education Recognition Program Standards. This document reflects knowledge and tools that were available through August 31, 2009.

# **Monitoring Progress and Outcomes**

# Why?

Ongoing evaluation is necessary to monitor, manage, and improve the effectiveness of DSME processes and outcomes. Use continuous quality improvement (CQI) principles to evaluate quality of the education experience and identify opportunities for improvement.

#### How?

- A. Evaluate individuals' needs and progress in meeting their goals at each encounter.
- B. Ensure data collection methods reflect targeted service objectives.
- C. Evaluate clinical measures to compare individuals who received DSME with those who did not.
- D. Evaluate individual, staff, and community satisfaction with the DSME services.
- E. Use evidence-based standards to evaluate DSME processes and outcomes.
- F. Conduct continuous quality improvement (CQI) activities for an effective evaluation method of quality DSME services.
- G. Refer to the Centers for Disease Control and Prevention Evaluation Working Group website for further information on evaluation methods: <a href="http://www.cdc.gov/eval/index.htm">http://www.cdc.gov/eval/index.htm</a>

The following measures can be used to monitor the effects of implementing the DSME best practice:

### **Individual Measures**

- Percentage of individuals with diabetes and those at risk for diabetes with documented clinical and behavioral goals:
  - Documentation and ongoing assessment of individually identified clinical and behavioral goals are tracked using Patient and Family Education Codes.
- Percentage of individuals who achieved clinical and behavioral goals:
  - Documentation is completed for patient success in achieving self-identified goals.
- Percentage of individuals who are confident to manage their health, diabetes, and health care:
  - Individual reports of confidence in self-management are documented.
- Changes in individual satisfaction with the DSME services received:
  - Assessment of satisfaction or dissatisfaction is undertaken through individual surveys, targeted interviews, focus groups, etc.

# **DSME Service Measures**

- Percentage of individuals with diabetes or at risk for diabetes with documented evidence of completing the DSME process:
  - Delivery of DSME services is being documented with evidence for all five steps of the process:
    - 1) assessment
    - 2) goal-setting
    - 3) planning
    - 4) implementation
    - 5) evaluation and monitoring.
- Percentage of medical records with DSME documentation:
  - DSME can be tracked using IHS RPMS Patient and Family Education Codes (e.g., conduct health records review).

- Percentage of individuals who receive DSME services who complete their planned DSME:
  - Evaluation is made of the extent to which individuals who received DSME services complete their documented DSME plans.
- Percentage of individuals participating in DSME services who demonstrate improvement in clinical and behavioral measures:
  - Baseline and post-intervention clinical and behavioral measures are selected to track DSME effectiveness.
- Changes in effectiveness of a referral system among multi-disciplinary clinical resources and community-based programs for ongoing self-management support:
  - A written policy and procedure is in place and effective for two-way referral system(s) among multi-disciplinary clinical resources and community-based programs.
  - A medical records review process exists to assess the effectiveness of referral and response communications:
    - 1) documentation of referral
    - 2) appropriateness of the information provided, and
    - 3) timeliness of referral.
  - Changes in staff reports of effectiveness are apparent.
- Changes in staff satisfaction with the DSME services:
  - Satisfaction or dissatisfaction is assessed through the use of staff surveys, targeted interviews, focus groups, etc.

# **Key Measures**

#### **Key Measures for Monitoring Progress and Outcomes**

The following measures are of primary importance:

- 1) Number of patients who completed or partially completed the DSME process in the past twelve months.
- 2) Changes in patients' clinical and behavioral outcomes.

# **Clinical Recommendations**

# 1. Determine local needs for diabetes education and resources required to deliver quality DSME and support.

# Why?

Diabetes affects communities in different ways. Clinical and community organizations must work together to plan and provide appropriate interventions for all individuals with diabetes and those at risk for diabetes. DSME is a critical element of diabetes care, yet many people with diabetes do not receive any comprehensive DSME and support services. In addition, many people at risk for diabetes do not receive the self-management education and support they need to prevent or delay the onset of diabetes.

An assessment of the community's diabetes education needs is a critical first step to maximize the effectiveness of DSME. An evaluation of available community and health care system resources is important to identify and fill gaps in resources needed to support interventions (Funnel, 2007).

#### How?

- A. Obtain a commitment for DSME and support services.
- B. Designate a champion to coordinate DSME and support services.
- C. Establish a diabetes team and advisory group early in the assessment and planning process.
- D. Conduct a community diabetes education needs assessment to identify the target population, to determine resources needed to meet identified needs, and to identify gaps in available local resources. An assessment should identify the:
  - extent to which diabetes and the risk for diabetes are problems within the local community, using existing clinical data and information systems
  - educational needs of all individuals with diabetes and/or those at risk for diabetes
  - available community programs and resources that could partner in the provision of DSME and support services
  - gaps in clinical services and community resources
  - access issues

- community and target population demographics:
  - 1) age
  - 2) formal educational level
  - 3) literacy level
  - 4) barriers to participation, and
- other locally identified needs and/or desires.
- E. Identify potential sources of data and tools to collect information for the education needs assessment. Examples may include:
  - IHS Diabetes Care and Outcomes Audit
  - diabetes or pre-diabetes registries
  - focus groups
  - community surveys
  - diabetes knowledge/skills survey
  - consumer and staff feedback

# 2. Implement DSME using a five-step process.

## Why?

DSME is an interactive, collaborative, ongoing process that involves people with diabetes and those at risk for diabetes interacting with members of the health care team. DSME helps people with diabetes and those at risk acquire knowledge, skills, attitudes, and behaviors needed to make the best decisions about their daily diabetes and risk factor management, to improve their quality of life. The DSME process guides the health care team in developing individualized patient treatments and in incorporating psychosocial and lifestyle issues into the plan of care.

#### How?

#### A. Assessment

Identify the specific educational needs of individuals with diabetes and those at risk for diabetes.

Consider the following factors about the individual with diabetes or at risk for diabetes in a DSME assessment:

- health and medical history
- nutrition history and practices
- physical activity and exercise behaviors

- physical factors, including age, mobility, visual acuity, hearing, manual dexterity, alertness, attention span and ability to concentrate, special needs or limitations that require accommodations or adaptive support, and use of alternative skills
- prescription and over-the-counter medications and complementary or alternative therapies and practices
- factors that influence learning such as education and literacy levels, perceived learning needs, motivation to learn, and health beliefs
- diabetes self-management behaviors, including experience with self-adjustment of treatment plans
- previous DSME, actual knowledge, and skills
- psychosocial concerns, factors, or issues, including extent and type of family and social support
- current mental health status
- history of substance use, including alcohol, tobacco, and recreational drugs
- occupation, vocation, education level, financial status, and social, cultural, and religious practices, and
- access to and use of health care resources.

# **B. Setting Goals**

Work with individuals to identify their health priorities and to set self-management goals that are important to them, that they feel confident about accomplishing successfully.

# C. Planning

Collaboratively develop an education plan to direct learning and behavioral interventions aimed at helping individuals achieve their self-management goals.

# D. Implementing the Plan

Provide diabetes education using a curriculum that meets the National Standards for DSME, such as the IHS Balancing Your Life and Diabetes Curriculum. The curriculum should include measurable, written learning objectives, content outline, instruction methods, materials, and evaluation methods. Content should include:

1. describing the diabetes disease process, along with prevention and treatment options

- 2. incorporating nutritional management into the person's lifestyle
- 3. incorporating physical activity into the person's lifestyle
- 4. using medication(s) safely and for maximum therapeutic effectiveness
- 5. monitoring blood glucose and other parameters; interpreting and using the results for self-management decision-making
- 6. preventing, detecting, and treating acute complications
- 7. preventing, detecting, and treating chronic complications
- 8. developing personal strategies to address psychosocial issues and concerns, and
- 9. developing personal strategies to promote health and behavior changes.

# E. Evaluation and Monitoring

Develop a follow-up plan that includes how the individual and his or her health care team will stay in touch to evaluate progress and problems, and to revisit (renegotiate) goals and plans. Conduct periodic evaluation of participant-defined (or individualized) self-management goals and outcomes.

#### On follow-up:

- 1. Evaluate progress toward goal attainment.
- 2. Check adequacy of existing goals and action plans.
- 3. Renegotiate plans, identify problems encountered, and explore creative ways to deal with problems.

# 3. Use evidence-based standards to guide the development of quality DSME services.

# Why?

The National Standards for Diabetes Self-Management Education (NSDSME) provide guidelines for quality DSME that can assist diabetes educators from a variety of settings in providing evidence-based education. These guidelines can be used by any IHS, Tribal, and Urban (I/T/U) facility that wants to enhance the quality and effectiveness of its DSME services. I/T/U facilities that have formal DSME programs and are seeking accreditation will need to meet all standards and criteria of the NSDSME.

The NSDSME were revised in 2007 to address current scientific evidence and expert consensus. The IHS Integrated Diabetes Education Recognition Program (IDERP) adopted the 2007 NSDSME and revised program review criteria in 2008 to reflect the changes.

#### How?

#### A. Learn more about the IHS IDERP

The IDERP provides guidance for developing quality DSME programs within I/T/U health care facilities. The IHS Division of Diabetes Treatment and Prevention (DDTP) administers IDERP, which provides recognition to DSME programs at I/T/U health care facilities by accrediting quality programs. Accreditation demonstrates to the public that a program meets the NSDSME. In addition, IDERP accreditation can qualify a program to seek reimbursement from Medicare.

IDERP uses a three-staged approach and framework based on the NSDSME:

Level 1 – Developmental Self-Assessment

Achievement of all review criteria and indicators at this level provides a program with a framework to build the infrastructure and develop the processes necessary to sustain a quality DSME program.

Level 2 – Diabetes Education Program Recognition

Achievement of all review criteria and indicators at this level shows the local community that the program is meeting all the standards for a quality DSME program. IHS Diabetes Education Program Recognition (Level 2) is awarded when there is documented evidence that a DSME program meets all the review criteria for Level 2.

Level 3 – Integrated Diabetes Program Recognition

Achievement of all review criteria and indicators at this level shows that a program provides exceptional diabetes education and care for its community by integrating public health, DSME, and clinical services. The program must have achieved and maintained IHS Diabetes Education Program Recognition (Level 2) for three years before submitting a Level 3 application. IHS Integrated Diabetes Program Recognition (Level 3) is awarded when there is documented evidence that a program meets all review criteria and indicators for Level 3.

#### B. Use the IHS IDERP framework and checklists

Develop a DSME program structure, process, and evaluation methods for providing quality DSME services.

http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=programsIDERP

- C. Attend an IHS IDERP Workshop
- D. Seek Technical Assistance Through DDTP
- E. Submit an Application for DSME Program Recognition

# **Community Recommendations**

# 1. Provide DSME and support in the community.

# Why?

Community DSME activities provide ongoing self-management support for people with diabetes and those at risk for diabetes, increase awareness of diabetes management issues, and promote healthy lifestyles for community members. These impacts can foster a supportive environment both for people with diabetes and for those at risk.

#### How?

There are evidence-based recommendations and helpful tools available for implementing community-based DSME activities. In 2009, the Partnership for Prevention released a DSME toolkit, *The Community Health Promotion Handbook: Action Guides to Improve Community Health,* on its website. The DSME Action Guide provides information on the resources and key steps to establish a community-based DSME program. It is designed primarily to assist public health practitioners in implementing evidence-based practices. Additional audiences who may benefit from using this resource include local planners, advocates, policy makers, community and business leaders, community-based organizations, educators, clinical health care providers, and others interested in improving health in their communities (see Organizational Tools).

# 2. Prepare individuals with diabetes and those at risk for diabetes to manage their diabetes, their health, and their health care.

# Why?

Health care professionals and paraprofessionals working in American Indian and Alaska Native community settings can provide culturally relevant DSME resources and support within their communities. Public health nurses, nutritionists, fitness educators, community health representatives, and community health aides are uniquely positioned members of the health care team. They know the individuals and families who live in their communities. They speak the language, know the culture, and are familiar with local challenges. With specialized diabetes training, they can become a vital link between people with diabetes and those at risk for diabetes and clinical health care team members. Through multi-disciplinary collaboration, they are able to integrate their knowledge of individuals, families, language, and local culture to improve individual patient outcomes and reduce the burden of diabetes in their communities.

#### How?

- A. Help people with diabetes and those at risk for diabetes understand their important role in managing their health:
  - 1. Encourage individuals to understand that their actions can have a major impact on their health.
  - 2. Link individuals and family members with clinical care team members; reinforce their key role within their health care team.
  - 3. Use programs that provide basic information, emotional support, and strategies for living with diabetes.
- B. Use self-management support strategies that include: goal-setting, action planning, problem-solving, and follow-up:
  - 1. Work with individuals to develop a written care plan based on needs prioritized by the individual, that includes collaborative goals, action plans to achieve goals, and a follow-up date.
  - 2. Assist individuals in setting personal goals. Renegotiate goals as needed.
  - 3. Use problem-solving and motivational interviewing techniques to help individuals and families that are struggling.
  - 4. Provide individuals with methods to monitor diabetes and the lifestyle changes they are making to prevent diabetes.
- C. Organize and integrate community and clinical resources to provide ongoing self-management support to individuals with diabetes and those at risk:
  - 1. Link individuals and family members to existing community organizations, health programs, and resources for medical care, education, and lifestyle support.

- 2. Train all members of the multi-disciplinary team in goal-setting, action planning, and problem-solving.
- 3. Organize the care team to follow-up with individuals on their goals and plans.
- 4. Develop additional expertise for ongoing training and for more specialized situations such as group interactions.
- 5. For individuals with additional needs, such as substance abuse or major mental health diagnoses, provide appropriate resources or link the individuals with organizations offering additional resources.

# **Organization Recommendations**

# Identify DSME as an important element of the organization.

# Why?

A health care organization that wants to improve DSME must be motivated and prepared for change throughout the entire organization. Leadership must identify that delivering quality, comprehensive DSME services is an organizational priority. They must also develop clear improvement goals, policies, and effective improvement strategies. This will encourage the entire organization to make changes that will enhance the provision of quality DSME and support services.

#### How?

- A. Institute broad system and programmatic changes:
  - 1. Support the DSME team through written commitments, mission statements, goals, and specific objectives.
  - 2. Establish an advisory body that meets and/or communicates regularly to plan and review education processes, review patient outcomes, and address community concerns related to DSME services.
  - 3. Designate a coordinator with skills in planning, implementing, and evaluating DSME services.
  - 4. Establish a DSME team that includes primary care and diabetes education professionals and community program representatives (as appropriate).

- 5. Allocate appropriate resources for effective DSME services, including a teaching environment that provides:
  - privacy, safety, and accessibility
  - teaching space, materials, furniture, lighting, storage, ventilation, and
  - an adequate number of trained staff to address the needs of people with diabetes and those at risk for diabetes.

# **Evaluating DSME Services**

Evaluation of DSME services is essential to determine what works and what does not work. DSME services need to be evaluated based on goals, objectives, and measures established early in the planning process. The goals, objectives, and measures should be reviewed periodically and may change over time.

Evaluation will show if changes need to be made to improve the DSME services. Evaluation also provides information that can be used to share successes with people with diabetes, those at risk for diabetes, providers, Tribal leaders, administrators, community members, and other stakeholders.

Consider including the following sources of data:

- Diabetes Care and Outcomes Audit data for individuals and for groups of people with diabetes or those at risk for diabetes
- iCare reports for individuals or groups of people with diabetes or those at risk for diabetes
- Clinical Reporting System (CRS) data such as data for the Government Performance and Results Act (GPRA) and Indian Health Performance Evaluation System (IHPES)
- other local measures that address process and outcome data such as participation rates, patient confidence, and behavioral outcomes.

For more information on Program Planning and Evaluation, refer to web-based training on the DDTP website:

http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Training/WebBased/Basics/Creating/Workbook.pdf

# **Sustaining DSME Services**

Often, DSME services must be in place for more than a few years before stated goals and objectives can be reached. Here are some helpful tips for sustaining DSME services:

- Ensure that DSME services are included in the health care organization's long term strategic plan.
- Establish a cohesive team that is engaged in maintaining results-oriented DSME services.
- Integrate DSME services into clinical services and community programs.
- Orient new clinical and community staff to DSME services, and to their roles and responsibilities.
- Provide ongoing training for staff and community members relative to their responsibilities for providing DSME services.
- Explore third-party reimbursement opportunities for innovative DSME services.

# **Tools and Resources**

# **Educational Resources for People with Diabetes**

IHS Division of Diabetes Treatment and Prevention Online Catalog <a href="http://www.ihs.gov/MedicalPrograms/Diabetes/RESOURCES/Catalog/rde/index.cfm?mo">http://www.ihs.gov/MedicalPrograms/Diabetes/RESOURCES/Catalog/rde/index.cfm?mo</a> dule=catalog

Diabetes Easy-to-Read Series for Individuals or Clients <a href="http://diabetes.niddk.nih.gov/dm/ez.asp">http://diabetes.niddk.nih.gov/dm/ez.asp</a>

National Diabetes Education Program Materials for American Indians and Alaska Natives with Diabetes http://www.ndep.nih.gov

#### **Provider Resources**

# **Curricula Developed by the IHS Division of Diabetes Treatment and Prevention**

**Balancing Your Life and Diabetes Curriculum** – This comprehensive diabetes curriculum addresses the National Standards for Diabetes Self-Management Education and provides information about type 2 diabetes, diabetes self-management, and healthy lifestyle practices.

Note: This curriculum is currently under revision and will be available soon in the IHS/DDTP Online Catalog.

http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=toolsCurricula

**Balancing Your Food Choices: Nutrition and Diabetes** – This supplement to the Balancing Your Life and Diabetes (BYLD) Curriculum addresses nutrition and diabetes. This supplement is intended for use with the BYLD Curriculum.

Note: This curriculum will be available soon in the IHS/DDTP Online Catalog.

**Beautiful Beginnings: Pregnancy and Diabetes** – This supplement to the BYLD Curriculum addresses pregnancy and diabetes, including pre-gestational and gestational diabetes. This supplement is intended for use with the BYLD Curriculum.

Note: This curriculum will be available soon in the IHS/DDTP Online Catalog.

#### Other Curricula

Native American Diabetes Project. University of New Mexico. **Strong in Body and Spirit!** This Native American-specific curriculum is designed to be led by community health workers to help people eat healthy foods and increase physical activity. <a href="http://www.laplaza.org/health/dwc/nadp/">http://www.laplaza.org/health/dwc/nadp/</a>

American Association of Diabetes Educators. **Diabetes Education Curriculum: Guiding Patients to Successful Self-Management**, 2009. Based upon the AADE7
Self-Care Behaviors framework, the AADE's *Diabetes Education Curriculum: Guiding Patients to Successful Self-Management* curriculum supports diabetes educators in their efforts to help people with diabetes and related conditions learn to make daily decisions about self-care that have a positive impact on their clinical outcomes and overall health status. The Curriculum is a CD-ROM product that contains a printable PDF. http://www.diabeteseducator.org

International Diabetes Center. **Type 2 Diabetes BASICS Curriculum/Starter Kit.** 3rd Edition, 2009. Includes instructor's curriculum guide, easy-to-read patient book, and forms for collecting information and evaluation.

http://www.parknicollet.com/healthinnovations/shopping/ProductDetail.cfm?productid=2058-BKIT

Michigan Diabetes Research and Training Center. **Life with Diabetes: A Series of Teaching Outlines, 3rd edition.** The Michigan Diabetes Research and Training Center has developed a curriculum that can be used to design and implement DSME. This curriculum meets current Standards for Diabetes Self-Management Education and is published and distributed by the American Diabetes Association (ADA). <a href="http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455">http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455</a> <a href="http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455">http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455</a> <a href="http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455">http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455</a> <a href="http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455">http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455</a> <a href="http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455">http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455</a> <a href="http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455">http://store.diabetes.org/products/product\_details.jsp?PRODUCT%3C%3Eprd\_id=8455</a> <a href="http://store.diabetes.org/products/product\_details.jsp?pro

**U.S. Diabetes Conversation Map**®. The Conversation Map tool combines a series of images and metaphors on a 3-foot (one meter) by 5-foot (1.5 meters) tabletop display. It serves as a facilitation tool for health care professionals to use to engage people in conversations around a health care topic such as diabetes, heart health, or obesity. <a href="http://www.healthyinteractions.com/us/en/diabetes/hcp/about/conversationmaptools">http://www.healthyinteractions.com/us/en/diabetes/hcp/about/conversationmaptools</a>

University of Alaska Fairbanks Cooperative Extension Service. Living Well Alaska Leader Course. This course prepares participants to lead a six-week chronic disease self-management program in their communities. The program is ideal for CWAs who want to provide support for individuals with chronic conditions such as diabetes and can be built into diabetes or heart disease education programs. It is designed to be led by non-experts, allowing individuals with chronic conditions to develop self-efficacy and habits for self-care. Implementing the program in the community is easy and training can be provided to professionals or community volunteers. The State of Alaska DHSS and Cooperative Extension Service will help with program supplies and outreach; travel support may be available for the three and one-half day training. For more information, contact:

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Assistant Professor of Extension—Health, Home, and Family Development
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# **Organizational Tools**

American Association of Diabetes Educators. Offers resources, teaching, and evaluation tools for diabetes educators. *The Art and Science of Diabetes Self-Management Education* takes a patient-centered approach to teach diabetes educators effective strategies for helping people with diabetes make behavior changes. American Association of Diabetes Educators. AADE7<sup>™</sup> Self-Care Behaviors framework. <a href="http://www.diabeteseducator.org/">http://www.diabeteseducator.org/</a>

**CDC Division of Diabetes Translation**. Provides data and trends on diabetes, a variety of informational materials (e.g., fact sheets, brochures, reports), and links to diabetes projects. <a href="http://www.cdc.gov/diabetes">http://www.cdc.gov/diabetes</a>

**IHS Division of Diabetes Treatment and Prevention**. Offers DSME program recognition and a variety of educational materials tailored for American Indians and Alaska Natives. <a href="http://www.ihs.gov/MedicalPrograms/Diabetes/index.asp">http://www.ihs.gov/MedicalPrograms/Diabetes/index.asp</a>

**National Diabetes Education Program**. Offers information and materials for diabetes awareness campaigns, resources for health care professionals and American Indians and Alaska Natives with diabetes and those at risk, and toolkits for community programs and partnerships to promote diabetes education. <a href="http://www.ndep.nih.gov">http://www.ndep.nih.gov</a>

Partnership for Prevention. Diabetes Self-Management Education (DSME): Establishing a Community-Based DSME Program for Adults with Type 2 Diabetes to Improve Glycemic Control—An Action Guide. The Community Health Promotion Handbook: Action Guides to Improve Community Health. Washington, DC: Partnership for Prevention; 2009. http://www.prevent.org/actionguides/DiabetesProgram.pdf

**Robert Wood Johnson Foundation Diabetes Initiative**. Provides links to DSME programs, training and assessment materials, and a section on "lessons learned" submitted by grantees. <a href="http://diabetesnpo.im.wustl.edu/index.html">http://diabetesnpo.im.wustl.edu/index.html</a>

#### **Web-based Resources**

**IHS Division of Diabetes Treatment and Prevention [Internet**]. Creating Strong Diabetes Programs: Plan a Trip to Success. An on-line training course on effective program planning and evaluation. [Developed 2009, July] <a href="http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=trainingBasicsCreating">http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=trainingBasicsCreating</a>

**IHS Division of Diabetes Treatment and Prevention [Internet].** Creating Strong Diabetes Programs: Plan a Trip to Success. A workbook (to accompany on-line training course above) on effective program planning and evaluation. [Developed 2006, July] <a href="http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Training/WebBased/Basics/C">http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Training/WebBased/Basics/C</a> reating/Workbook.pdf

# American Association of Diabetes Educators Diabetes Education Accreditation Program

http://www.diabeteseducator.org/ProfessionalResources/accred/

# American Diabetes Association http://www.diabetes.org/

The American Diabetes Association (ADA) funds research; publishes scientific findings; provides information and other services to people with diabetes, their families, health care professionals, and the public; and advocates for scientific research and the rights of people with diabetes. ADA's Native American Program, Awakening the Spirit, provides information specific to Native Americans, and conducts advocacy and recognition of excellence in diabetes prevention and treatment services in American Indian and Alaska Native communities by sponsoring the annual SDPI "Voices for

Change" Awards Program. <a href="http://www.diabetes.org/communityprograms-and-localevents/nativeamericans/awakening.jsp">http://www.diabetes.org/communityprograms-and-localevents/nativeamericans/awakening.jsp</a>

# American Diabetes Association Education Recognition Program

http://professional.diabetes.org/recognition.aspx?cid=57995

#### **American Dietetic Association**

The American Dietetic Association is the nation's largest organization of food and nutrition professionals. Its mission is to promote optimal nutrition and well-being for all people by advocating for its members. <a href="http://www.eatright.org/">http://www.eatright.org/</a>

**CDC Division of Diabetes Translation** provides data and trends on diabetes, a variety of informational materials (e.g., fact sheets, brochures, and reports), implements the National Diabetes Education Program, and provides links to diabetes projects. <a href="http://www.cdc.gov/diabetes">http://www.cdc.gov/diabetes</a>

**Diabetes Initiative of the Robert Wood Johnson Foundation** provides links to DSME programs, training and assessment materials, and a section on "lessons learned" submitted by grantees. <a href="http://diabetesnpo.im.wustl.edu/index.html">http://diabetesnpo.im.wustl.edu/index.html</a>

**Institute for Healthcare Improvement.** Improvement Methods. Describes the basics of the continuous quality improvement (CQI) process. The Plan-Do-Study-Act (PDSA) cycle is shorthand for testing a change in the real world setting—by planning it, trying it, observing the results, and acting on what is learned.

http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/

### **National Diabetes Education Program**

http://www.ndep.nih.gov

http://www.cdc.gov/diabetes/ndep

http://www.diabetesatwork.org

http://www.betterdiabetescare.nih.gov

http://www.YourDiabetesInfo.org

The National Diabetes Education Program brings together public and private partners to improve treatment and outcomes for people with diabetes, promotes early diagnosis, and prevents the onset of type 2 diabetes. It promotes awareness and education activities and quality care. The Website provides tools for educating health care providers and individuals with diabetes and those at risk for diabetes.

# **National Diabetes Information Clearinghouse**

The NIDDK's National Diabetes Information Clearinghouse (NDIC) is an information and referral service designed to increase knowledge about diabetes among people with diabetes, those at risk, and their families, health care professionals, and the public. http://diabetes.niddk.nih.gov

## **HRSA Health Disparities Collaboratives**

The Health Disparities Collaboratives is a program that includes the Bureau of Primary Health Care, Institute for Healthcare Improvement, National Association of Community Health Centers, Inc., and other strategic partners to generate and document improved health outcomes for underserved populations; transform clinical practice through models of care, improvement, and learning; develop infrastructure, expertise, and multi-disciplinary leadership to support and drive improved health status; and build strategic partnerships. <a href="http://www.healthdisparities.net">http://www.healthdisparities.net</a>

# **Examples of Current Best Practice Programs**

# **Sells Hospital Diabetes Self-Management Education Program**

IHS Sells Service Unit Barbara Khan, MS RD CDE DSME Coordinator PO Box 548 Sells, AZ 85734

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# **Muscogee Creek Nation: Educating Partners in Care (EPIC)**

Okmulgee Health Center Sherry O'Mara, RN CDE DSME Coordinator 1313 East 20th Okmulgee, OK 74447

Phone: 918-591-5755

Email: sherry.omara@creekhealth.org

# **Indian Health Board of Minneapolis**

Tammy Didion, RD LD DSME Coordinator 1315 E. 24th ST Minneapolis, MN 55404

Phone: 612-436-2676

Email: theinicke@ihb-mpls.org

#### **Additional Contacts**

Contacting other people involved in DSME programs is important because they can help you get started. Your peers at other health care organizations can share their expertise, materials, and ideas and can tell you what has worked for them and what has not worked. This can help you avoid reinventing the wheel. Here are some tips on how to connect with others:

#### **Area Diabetes Consultant website:**

http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=peopleADC

# **IHS Integrated Diabetes Education Recognition Program (IDERP)**

Robin G. Thompson, MS APRN BC-ADM CDE IDERP Review Coordinator Indian Health Service 5300 Homestead Road NE Albuquerque, NM 87110 Robin.Thompson@ihs.gov

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# Appendix A.

# Improving Diabetes Self-Management Education in the Indian Health System

There are three fundamental questions to ask as you plan and implement your best practice:

- 1. What are you trying to accomplish?
- 2. How will you know if what you do makes things better?
- 3. What can you do to make things better?

This Appendix contains two examples of these fundamental questions for improving DSME services. The first example looks at DSME from an organizational perspective. The second example looks at DSME from the perspective of the individual with diabetes.

# **Example 1. DSME Organizational Perspective**

# 1. What are you trying to accomplish?

To establish an organizational framework to provide quality DSME services.

# 2. How will you know if what you do makes things better?

- Collect and display data on an ongoing basis. Analyze the data and use it to plan next steps.
- Improved data results suggest that things are getting better.

# **Examples of Process Improvements**

In the past twelve months:

- 50% of people with diabetes have received DSME services with documented evidence of all five steps of the DSME process:
  - 1) assessment
  - 2) goal setting
  - 3) planning
  - 4) implementation
  - 5) evaluation and monitoring

- There was a 20% increase in the number of documented referrals to DSME services from selected clinical and community programs.
- There was a 15% increase in the number of documented referrals from DSME services to selected clinical and community programs.

## **Examples of Outcome Improvements**

In the past twelve months, among people with diabetes who have completed their planned DSME services:

- There has been a 20% increase in the number of people with diabetes whose mean blood pressure (three most recent measures) is ≤ 130/80.
- There has been a 10% increase in the number of people with diabetes whose A1c, BP, and LDL are at goal.
- There has been a 20% increase in the number of people with diabetes with documented successful achievement of one or more diabetes self-management behavior goal(s).

# 3. What can you do to make things better?

# **Organizational Changes**

- Receive leadership support to initiate and improve DSME services and to incorporate the five step DSME process as part of the treatment plan for each individual with diabetes or those at risk for diabetes.
- Conduct ongoing evaluation of the adequacy of available resources to support DSME services.
- A member of the team is designated as the coordinator of DSME Services.
- A diabetes advisory group represents DSME stakeholder perspectives.

#### Clinical System Changes

- The diabetes team's medical staff and pharmacy representatives lead work to develop and implement protocols that guide our use of diabetes, hypertension, and lipid-lowering agents.
- Standing orders are approved that allow non-physician professionals to work at the top of their licensure. They will initiate lab tests and adjust medication dosages.

 Members of the care team have timely access to clinical data for people with diabetes or those at risk (lab, measures, self-management goals, etc.).

# **Clinical and Community Changes**

- The DSME Process is a high priority item within the program plan.
- The multi-disciplinary team works together to identify gaps in DSME services and to identify and test realistic solutions.
- Implementation of DSME is addressed in selected clinical and community care settings.
- Processes are developed that enhance implementation and documentation of two-way referrals among inpatient, primary care, community, and DSME entities.

# **Example 2. The Individual's Experience of DSME**

# 1. What are you trying to accomplish?

To provide patient-centered DSME services.

# 2. How will you know if what you do makes things better?

Use results of individual report data to enhance DSME effectiveness. Individuals with diabetes and those at risk will rate their DSME experience:

- "My educator asks questions to understand what's important to me."
- "My self-management goals address things that are important to me."
- "My action plans help me make the health changes that I want to make."
- "My educator gives me valuable information."
- "When the need comes up, I work with my educator to change my goals and action plans."

In the past twelve months, individuals who have completed their planned DSME services:

- have successfully changed one or more health or diabetes behaviors, and
- are confident they can manage and control most of their diabetes problems.

### 3. What can you do to make things better?

 Test ideas that help individuals understand how important their role is in managing their health.

- Use patient reports to enhance the effectiveness of DSME encounters.
- Recruit two individuals with diabetes and two family members to participate actively in multi-disciplinary diabetes team activities.
- Ask consumers to participate in identifying and assessing local programs and resources that will be included in a diabetes resource directory.